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[AU/AU]; C/O - COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, Manufacturing and Infrastructure Technology, PO Box 56, Graham Road, Hightett, VIC 3190 (AU).

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(74) Agents: CURWEN, Julian, C. B. et al.; Davies Collison Cave, 1 Nicholson Street, Melbourne, Victoria 3000 (AU).

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(71) Applicant (for all designated States except US): COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION [AU/AU]; Limestone Avenue, Campbell, Australian Capital Territory 2602 (AU).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SAGOE-CRENTSIL, Kwesi Kurentsir [AU/AU]; C/O - COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION, Manufacturing and Infrastructure Technology, PO Box 56, Graham Road, Hightett, VIC 3190 (AU). WENG, Luqian [CN/CN]; CO - COLLEGE OF MATERIALS SCIENCE AND ENGINEERING, NANJING UNIVERSITY OF AERONAUTICS AND ASTRONAUTICS, 29 Yudao Street, Jiangshu, 210016 Nanjing (CN). TAYLOR, Alan, Harry

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(54) Title: HYBRID INORGANIC POLYMER SYSTEMS

(57) Abstract: An inorganic polymer which comprises one or more organic functional groups and which has the following empirical formula: R<sub>m</sub>[M<sub>2</sub>O]<sub>x</sub>[Al<sub>2</sub>O<sub>3</sub>]<sub>y</sub>[SiO<sub>2</sub>]<sub>z</sub>X<sub>q</sub>.PH<sub>2</sub>O, in which: R represents an organic functional group; M is an alkali metal; X is selected from chlorine and fluorine; m is >0; q is ≥ 0; x is from 1 to 1.6; y is from 1.0; x/y is from 1.0 to 1.6; z is from 3 to 65; z/y is ≥ 1.0; and P is from 3 to 5.